

Docket No.: M4065.0206/P206-C
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Kanwal K. Raina

Application No.: NOT YET ASSIGNED

Confirmation No.:

Filed: December 9, 2003

Art Unit: N/A

For: METHOD TO INCREASE THE
EMISSION CURRENT IN FED
DISPLAYS THROUGH THE SURFACE
MODIFICATION OF THE EMITTERS

Examiner: Not Yet Assigned

INFORMATION DISCLOSURE STATEMENT (IDS)

MS Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement accompanies the new patent application submitted herewith.

Those patent(s) or publication(s) which are marked with an asterisk (*) in the attached form PTO/SB/08 (facsimile) are not supplied because they were previously cited by or submitted to the Office in a prior application no. 09/387,776, filed September 1, 1999 and relied upon in this application for an earlier filing date under 35 U.S.C. 120.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 04-1073, under Order No. M4065.0206/P206-C.

Dated: December 9, 2003

Respectfully submitted,

By 

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Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	NOT YET ASSIGNED
				Filing Date	December 9, 2003
				First Named Inventor	Kanwal K. Raina
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
Sheet	1	of	1	Attorney Docket Number	M4065.0206/P206-C

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	AA	5,210,472	05/1993	Casper et al.*	
	AB	5,808,400	09/1998	Liu*	
	AC	5,825,126	10/1998	Kim*	
	AD	5,869,169	02/1999	Jones*	
	AE	6,086,442	07/2000	Sandhu et al.*	
	AF	5,186,670	02/1993	Doan et al.*	
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	AK	5,853,492	12/1998	Cathey et al.*	
	AL	5,747,384	05/1998	Miyamota*	
	AM	5,888,906	03/1999	Sandhu et al.*	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	CA	John H. Das et al., "LOW WORK FUNCTION ADDRESSABLE SILICON FIELD EMISSION SINGLE CATHODE WITH INTEGRATED LATERAL FEEDBACK RESISTOR AND SUSPENDED HEATER", School of Electrical Engineering, pages 47-51.*	
	CB	W.A. Mackie, "WORK FUNCTION MEASUREMENTS OF DIAMOND FILM SURFACES", Linfield Research Institute, pages 2041-2045	
	CC	Qing-An Huang et al., "THE ADVANTAGES OF N-TYPE HEAVILY-DOPED SILICON AS AN EMITTER FOR VACUUM MICROELECTRONICS", 9 th International Vacuum Microelectronics Conference, 1996, pages 155-157.*	
	CD	B.C. Djubua et al., "EMISSION PROPERTIES OF SPINDT-TYPE COLD CATHODES WITH DIFFERENT EMISSION CONE MATERIAL", IEEE Transactions on Electron Device, Vol 38, No. 10, October 1991, pages 2314-2316.*	

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Sheet	2	of	1	Attorney Docket Number	M4065.0206/P206-C

	CE	Qi-Lue Chen et al., "INVESTIGATION OF ELECTRON TUNNELLING EMITTER", Beijing Vacuum Electronics Research Institute, pages 488-490.*	
	CF	J. Ishikawa et al, "CONE-SHAPED METAL INSULATOR SEMICONDUCTOR CATHODE FOR VACUUM MICROELECTRONICS", Dept. of Electronic Science and Engineering, Japan, pages 1970-1972	

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¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature		Date Considered	
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